Simple Steps to Organic Gardening

by Rick Weller, Founder of Organically Done Plant Products

"I'm an organic gardener". Many of you may wonder what this really means and the answer is quite simple: organic gardeners maintain their growing environment using natural products and processes. Of course, like everything else, the devil is in the details and we'll spend the bulk of this article discussing the most important of these, soil health.

A common misconception is that by not using chemical fertilizers or pesticides, you are gardening organically. While partially true, there are other aspects to consider that are keys to your success. Rather than 'I'm not using chemical fertilizers or pesticides, therefore I'm growing organically', your mindset should be 'I'm supporting a healthy soil and ecological environment and part of that is by not using chemical fertilizers or pesticides'.

Organic Gardening Highlights

Here are some basic steps to take when gardening organically.

- Develop a healthy soil
- Add quality compost every season – Compost provides a wealth of beneficial components to your garden including biology and organic matter. The best compost is your own made from yard (assuming you are not using chemicals) and kitchen waste.
- Add safe, natural amendments – Organic fertilizers can provide macro and micro nutrients, plant growth hormones, humic acids, organic matter, etc. These are all requirements for feeding soil microbial populations and providing for your plants' needs.
- Promote and nurture diversity – Nature provides the tools to maintain a healthy growing environment. Your job as an organic grower is to provide the elements these natural processes desire. Encourage pollinators by providing flowering plants. Attract beneficial insects by planting wild flowers and flowering herbs. Support beneficial biology by providing dark places, dense plantings and ground cover.
- Have a watering plan – Water management will differ a bit for organic growers. By focusing on your soil, you will develop better water retention capacity. Because your plants are healthier, they will be less susceptible to drought conditions. Course mulch applied to your growing surface will prevent evaporation as well as helping moderate soil temperatures. Your goal as a sustainability advocate is to only use the amount of water your plants require; observe your growing environment and adjust your watering habits to reflect this.
- Your garden is talking to you... and you should listen – observe plant health, soil biology and insect population. Do you have earth worms, bees, butterflies, lady bugs, deep green foliage, an abundance of flowers? Each of these (along with many more) are an indicator of how happy your natural environment is. Look for these signs every time you walk into your garden and respond as required.

While each of these elements plays an important role in your success, the key for the organic grower is your focus on soil.

Why Healthy Soil?

Physically, soil provides structure for air and water flow, easy rooting and plant anchoring. It also plays a biological role, holding and buffering nutrients and providing a habitat for microorganisms. Every teaspoon of healthy soil contains hundreds of millions of tiny creatures including bacteria, fungi, protozoa, nematodes, arthropods and earthworms. These are all critical for providing nutrients to your plants (nutrient cycling), maintaining soil structure, controlling disease and enhancing plant growth.

A healthy soil will provide the needs of your plant life: physical environment, water, air, food, vitamins, hormones, amino acids, etc. Like humans, when health is at an optimum, plants grow strong, robust and their natural defenses are more capable of providing protection from disease, pests, temperature variations and inadequate water conditions.

Developing Healthy Soil

OK, healthy soil supports healthy plants but how do you create soil health? The answer is complex (pH, CEC, air and water flow, nutrients, biology, etc.) but the approach is fairly simple. Let's start with developing a foundation.

Soil is made up of clay, silt, sand and organic matter. Our goal in general is a loamy soil (dark and crumbly), achieved with the proper proportions of these components. If growing in an isolated environment (raised bed, containers), a quality garden mix can generally be found at your better nurseries. Natural soil is difficult to convert permanently so, when growing in-ground, amending these proportions annually is often required.

Organic matter in your soil is constantly decomposing and should be added either each spring or fall (fall is best). Excellent sources of organic matter include compost (your local municipality may provide) and worm castings. Dry, finely-shredded leaves can be a simple substitute but should be added to garden 1-2 months prior to planting to allow for decomposition. Organic matter should be gently mixed (not tilled) into your growing soil to a depth of 6-8" if possible.

(Pettibone Farm Organic CSA member share)

In later articles we'll discuss other topics including organic fertilizers, pH control and pest management. But, as in all aspects of life, beginning with a solid foundation is critical to ongoing success.

Gardening with sound organic methods will result in healthy soil, healthy plants and a healthier overall environment. You will be thrilled with the taste and higher nutritional value of your fruits and vegetables, the longer-lasting brilliance of your flower blooms and the comfort knowing you have improved the safety of your environment for your children, pets and wildlife.

Coming next:
Organic amendments and fertilizers